

WHAT IS CLAIMED IS:

1. A system for percutaneous fracture repair of a bone, the system comprising:
a plate having a first feature and a second feature, the first feature and the second feature
5 being spaced apart from each other, said plate defining a longitudinal axis thereof;
a first attachment component operably associated with the first feature, said first
attachment component adapted for cooperation with the bone; and
a second attachment component operably associated with the second feature, said second
attachment component being percutaneously inserted into the second feature, said second
10 attachment component operably associated with the plate to provide a compressive force in the
bone, the compressive force having a component thereof in the longitudinal axis, said second
attachment component adapted for cooperation with the bone.
2. The system as in claim 1, wherein at least one of the first feature and the second
15 feature is defined by an opening through said plate.
3. The system as in claim 1, wherein at least one of said first attachment component and
said second attachment component comprises a screw.
- 20 4. The system as in claim 1:
wherein said second attachment component defines a first surface thereof; and
wherein said second feature defines a first surface thereof, the first surface of said second
attachment component cooperating with the first surface of said second feature as said second
attachment component advances toward said second feature to compress the bone.
- 25 5. The system as in claim 1, wherein the bone defines a fracture thereof, the fracture
defining a first bone portion and a second bone portion, said first attachment component and said
first feature associated with the first bone portion and said second attachment component and
said second feature associated with the second bone portion.

6. The system as in claim 1, further comprising a guide for guiding said second attachment component into engagement with said second feature and into said bone.

5 7. The system as in claim 6, wherein said guide comprises:
a body attachable to said plate; and
a tube extending from said body for guiding said second attachment component into cooperation with the second feature.

10 8. The system as in claim 7, further comprising:
a drill;
a first bushing slidably fitted to said tube, said first bushing adapted to guide said drill into a first relationship with said second feature and into the bone, said drill hereby forming a first bone hole in the bone, whereby when said second attachment component is passed in the
15 tube and engaged into the first bone hole, said plate cooperates with said second attachment component so that the bone is under compression; and
a second bushing slidably fitted to said tube, said second bushing adapted to guide said drill into a second relationship with said second feature and into the bone, said drill hereby forming a second bone hole in the bone, whereby when said second attachment component is
20 passed in the tube and engaged into the first bone hole, said plate cooperates with said second attachment component so that the bone is not under compression.

25 9. The system as in claim 6, wherein said guide comprises a portion of which is radiolucent.

10. The system as in claim 1, wherein said plate includes a portion thereof shaped to closely conform to the bone.

11. A system for percutaneous fracture repair of a long bone including a shaft portion and a condylar portion thereof, the long bone defining a fracture thereof, the fracture positioned at least partially between the shaft portion and the condylar portion, the system comprising:

5 a plate including a first portion for cooperation with the condylar portion and a second portion for cooperation with the shaft portion, said first portion defining a first opening there through and said second portion defining a second opening there through, the first opening and the second opening being spaced apart from each other, said plate defining a longitudinal axis thereof extending from the first portion to the second portion of said plate;

10 a first fastener adapted to at least partially pass through the first opening, said first fastener adapted to at least partially engage with the condylar portion of the bone; and

a second fastener adapted to at least partially pass through the second opening, said second fastener adapted to at least partially engage with the shaft portion of the bone, said second fastener being percutaneously inserted into the second opening, said second fastener contacting said plate adjacent with the second opening of said plate to provide a compressive force in the
15 bone, the compressive force having a component thereof in the longitudinal axis operably associated with the bone to provide a compressive force in the bone.

20 12. The system as in claim 11, wherein at least one of the first opening and the second opening is defined by an oval opening through said plate.

13. The system as in claim 11, wherein at least one of said first fastener and said second fastener comprises one of a screw and a pin.

25 14. The system as in claim 11:

wherein said second fastener defines a first surface thereof; and

wherein the second portion of said plate adjacent the second opening defines a first surface thereof, the first surface of said second fastener cooperating with the first surface of the second portion of said plate as said second fastener advances toward said second hole to advance

the shaft portion of the bone toward the condylar portion of the bone to serve to compress the bone.

15 15. The system as in claim 11, further comprising a guide for guiding said second fastener at least partially through the second hole and into said bone.

16. The system as in claim 15, wherein said guide comprises:
a body attachable to said plate; and
a tube extending from said body for guiding said second fastener at least partially through
10 the second hole.

17. The system as in claim 16, further comprising:
a drill;
a first bushing slidably fitted to said tube, said first bushing adapted to guide at least a
15 portion of said drill through the second plate hole and into the bone, said drill hereby forming a first bone hole in the bone, whereby when said second fastener is passed in the tube and engaged into the first bone hole in a first relationship whereby a surface of said plate adjacent the second plate hole cooperates with said second fastener so that the shaft portion of the bone is advanced toward the condylar portion of the bone to compress the long bone; and
20 a second bushing slidably fitted to said tube, said second bushing adapted to guide said drill into a second relationship with said second plate hole and into the bone, said drill hereby forming a second bone hole in the bone, whereby when said second fastener is passed in the tube and engaged into the second bone hole in a second relationship whereby said plate cooperates with said second fastener so that the shaft portion of the bone is remains in its previous
25 relationship with the condylar portion of the bone to assure that the long bone not under compression.

18. The system as in claim 15, wherein said guide comprises a portion of which is radiolucent.

19. A guide to assist in the percutaneous fracture repair of a bone having a first bone location and a spaced apart second bone location, the guide to be used to guide a fastener at least partially through an opening in a bone plate and into the bone, said guide comprising:

- 5 a body attachable to the bone plate adjacent the first bone location; and
 a tube fitted to said body for guiding the fastener percutaneously at least partially through the bone plate opening in the bone plate and into the bone at the second bone location, said body and said tube adapted to cooperate with the bone plate and with the fastener so that the bone is under compression between the first bone location and the second bone location.

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20. The guide as in claim 19, further comprising:

- a drill;
 a first bushing slidably fitted to said tube, said first bushing adapted to guide said drill into a first relationship with the bone plate adjacent the bone plate opening and into the bone,
15 said drill hereby forming a first opening in the bone, whereby when the fastener is passed in the tube and engaged into the first bone hole, the bone plate cooperates with the fastener so that the bone is under compression between the first bone location and the second bone location; and
 a second bushing slidably fitted to said tube, said second bushing adapted to guide said drill into a second relationship the bone plate adjacent the bone plate opening and into the bone,
20 said drill hereby forming a second bone hole in the bone, whereby when the fastener is passed in the tube and engaged into the first bone hole, the bone plate cooperates with said second attachment component so that the bone is not under compression between the first bone location and the second bone location.

25 21. The system as in claim 19, wherein said guide comprises a portion of which is radiolucent.

 22. The guide as in claim 19, wherein said tube includes a protrusion for cooperation with the bone plate adjacent the bone plate opening.

23. The guide as in claim 21, at least one of said first bushing and said second bushing includes a bushing protrusion, the bushing protrusion and the first mentioned protrusion cooperating with the bone plate adjacent the bone plate opening to align the one of said first
5 bushing and said second bushing to the bone plate.

24. The guide as in claim 19:
wherein said tube includes a tube locating feature; and
wherein at least one of said first bushing and said second bushing includes a bushing
10 locating feature, the bushing location feature cooperating with the tube locating feature to align said bushing in said tube.

25. The guide as in claim 19, further comprising an alignment fastener bushing fitted to said body, said alignment fastener bushing adapted to guide at least one of a alignment guide
15 fastener drill fastener into cooperation with the bone and an alignment fastener into cooperation with the bone plate and the bone to assist in supporting the guide onto the bone.

26. The guide as in claim 19, wherein said body and said tube are adapted to provide progressive compression of the bone by the first mentioned fastener and a second fastener .
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27. The guide as in claim 19, wherein said tube is integral with said body.

28. The guide as in claim 19:
wherein said guide is adapted for use with at least the first mentioned plate and a second
25 plate, the first mentioned plate having a different shape than the second plate;
wherein said body comprises a riser and a first targeting guide; and
further comprising a second targeting guide, said second targeting guide and said first targeting guide cooperating selectively with said riser, said first targeting guide for cooperation with the first mentioned plate and said second targeting guide for cooperation with the second plate.

29. A method for repairing a bone fracture on a bone having a condylar portion and a shaft portion, the method including the steps of:

5 providing a bone plate having a head portion for cooperation with the condylar portion and a body portion for cooperation with the shaft portion and a first opening in the head portion and a second opening in the body portion;

providing a first fastener;

securing the head portion of the bone plate to the condylar portion of the bone with the first fastener;

10 providing a second fastener; and

securing the body portion of the bone plate to the shaft portion of the bone by percutaneously securing the second fastener to the body portion of the plate and to the shaft portion of the bone while urging the shaft portion of the bone toward the condylar portion of the bone.

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30. The method of claim 29:

wherein the providing the bone plate further comprises providing the bone plate with a third opening in the body portion;

further comprising the step of providing a third fastener; and

20 further comprising the step of further compressing the bone by percutaneously securing the third fastener to the body portion of the plate and to the shaft portion of the bone while urging the shaft portion of the bone toward the condylar portion of the bone.

31. The method of claim 29, wherein the step of percutaneously securing the second fastener to the body portion of the plate and to the shaft portion of the bone includes the steps of:

25 providing a tube;

inserting the tube percutaneously through the skin to the bone plate; and

percutaneously securing the second fastener to the body through the tube.